

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please cancel claims 1-8 and add new claims 9-19 in accordance with the following:

Cancel 1-8

9. (New) A method for communication in a radio communication system comprising mobile stations and network-side devices, the network-side devices comprising network-side antennas distributed over a plurality of positions within a radio cell, the method comprising:

transmitting a signaling message which requests a mobile station to transmit a response message, the signaling message being transmitted via at least one network-side antenna, the signaling message being transmitted to the mobile station and being used exclusively for requesting the response message;

receiving the response message from the mobile station, the response message being received by at least some of the network-side antennas; and

after receiving the response message, transmitting a user data message to the mobile station via a plurality of transmitting network-side antennas, the transmitting network-side antennas being selected from the plurality of network-side antennas based on which network-side antennas received the response message from the mobile station.

10. (New) The method according to claim 9, wherein the signaling message is sent at regular time intervals.

11. (New) The method in accordance with claim 9, wherein the signaling message is transmitted only when a certain period of time elapsed since the last transmission of a message of the same type as the signaling message.

12. (New) The method in accordance with claim 9, wherein the signaling message is transmitted via all network-side antennas of the radio cell.

13. (New) The method in accordance with claim 9, wherein
the radio communication system has a plurality of cells, each with a plurality of network-side antennas distributed therein, and
the signaling message is transmitted via all network-side antennas of all radio cells.

14. (New) The method in accordance with claim 9, wherein
the signaling message is transmitted from a plurality of network-side antennas, and
the plurality of network-side antennas used to transmit the signaling message all belong to a same radio cell.

15. (New) The method in accordance with claim 9, wherein
the signaling message is transmitted from a plurality of network-side antennas,
the radio communication system has a plurality of cells, each with a plurality of network-side antennas distributed therein, and
the plurality of network-side antennas used to transmit the signaling message reside in at least two different radio cells.

16. (New) The method in accordance with claim 15, wherein
the signaling message identifies the radio cell in which the network-side antenna resides,
and
the response message identifies the radio cell or radio cells from which the mobile station received the signaling message.

17. (New) The method in accordance with claim 11, wherein
the signaling message is transmitted via all network-side antennas of the radio cell.

18. (New) A network-side device in a radio communications system, which
comprises network-side antennas distributed over a plurality of positions within a radio cell, the
network-side device comprising:

means for receiving via at least some of the network-side antennas a response message from a mobile station or for receiving information about receipt of the response message from the mobile station, which response message was received via at least some of the network-side antennas, the response message being received in response to a signaling message sent to and received at the mobile station via at least one network-side antenna, the signaling message being transmitted exclusively for the purpose of requesting the response message;

means for choosing transmitting network-side antennas from the plurality of network-side antennas, the transmitting network-side antennas being chosen based on which network-side antennas received the response message from the mobile station; and

means for causing a user data message to be transmitted to the mobile station via the transmitting network-side antennas.

19. (New) A computer readable medium storing a computer program for a network-side device in a radio communications system, which comprises network-side antennas distributed over a plurality of positions within a radio cell, the computer program comprising:

means for receiving information about receipt of a response message from a mobile station, the response message being received via at least some of the network-side antennas, the response message being received in response to a signaling message sent to and received at the mobile station via at least one network-side antenna, the signaling message being transmitted exclusively for the purpose of requesting the response message;

means for choosing transmitting network-side antennas from the plurality of network-side antennas, the transmitting network-side antennas being chosen based on which network-side antennas received the response message from the mobile station; and

means for causing a user data message to be transmitted to the mobile station via the transmitting network-side antennas.